Earth Materials

1-4 The student will demonstrate an understanding of the properties of Earth materials. (Earth Science)

1-4.1 Recognize the composition of Earth (including rocks, sand, soil, and water). Taxonomy level: 1.1-A Remember Factual Knowledge

Previous/Future knowledge: This is a foundational concept that students will develop further in future grades. In 3rd grade (3-3.1), students will classify rocks as sedimentary, metamorphic, or igneous and will identify the components of soil.

It is essential for students to know that Earth is made of different materials, including rocks, sand, soil, and water. An *Earth material* is defined as a resource that comes from Earth. Types of Earth materials include:

Rocks

- Rocks are hard, solid, nonliving materials that make up Earth.
- Rocks come in many different shapes, sizes, and colors and can be classified into different groups based on similar characteristics.

Sand

• Sand is made of tiny pieces of rock.

Soil

- Soil is the loose, top layer of Earth's surface made up of pieces of rock, sand, water, air, and pieces of dead organisms.
- The type of soil used the most for supporting life is the *topsoil*.
- It is used to grow plants.

Water

- Water is one of our most valuable resources on Earth.
- Every living thing needs water to survive.
- Water covers most of Earth, but only a small portion of it can be used for drinking.
- It can be salt water or fresh water.

It is not essential for students to use the classification terms for rocks at this grade level. Students do not need to identify the layers of soil (soil profile).

Assessment Guidelines:

The objective of this indicator is to *recognize* the composition of Earth materials; therefore, the primary focus of assessment should be to remember the characteristics about rocks, sand, soil, and water. However, appropriate assessments should also require students to *identify* an Earth material by its characteristics; or *recall* what an Earth material is.